

UPES Frequently Asked Questions

What is the UPES Controller?

The UPES controller is a U19 rack mount controller with 16 individual channels that can receive analog signals from up to 16 ESP Safety flame and gas detectors via 4-20mA.

What is the difference between the UPES analog and UPES digital?

The UPES analog can have 16 devices connected via analog current from the field. The UPES digital can have up to 128 devices connected via Modbus RS485 from the field.

What are the display indicators of the UPES display?

The UPES display has a scrolling display that shows the type of gas for each channel and the concentration level. The front of the display also has LED indicators for each channel. 3 LEDs for alarm levels and one Fault LED for each channel.

Do I need to have all 16 channels connected?

No, all of the channels do not necessarily need to be connected. The channels that do not have a gas or flame detector will be in fault mode. The unused channels may be turned off.

How do are the settings accessed on the UPES?

The buttons to access the programming menus can be accessed by loosening the screws of the front cover plate of the UPES controller.

Is there as sounder alarm available with the UPES?

Yes, the UPES has an optional sounder alarm that will be activated when any of the alarm threshold levels are reached. The sounder can be activated or disactivated by switching the position of the sounder switch, which can be accessed by opening the front cover plate of the UPES controller.

Why is the UPES controller showing a LED fault on the display when the device is connected to the that channel?

If a channel continues to show the fault LED ON after connecting a field device, there is a communication error. Verify that the UPES channel connections correspond to the correct wiring from the field. Make sure the +4-20 and Ground or -4-20 wires are connected properly at the terminal.

How can the UPES Channel be powered?

The UPES controller comes with an optional 110AC or 220VAC power supply. In addition, the UPES controller can also be powered with a 24VDC power supply.

If the UPES Controller is connected to a 110VAC or 220VAC power supply, can the UPES controller power the field devices via 24VDC?

Yes, each UPES channel can power the field device by supplying 24VDC from the channel terminal.

Why is the UPES not powering ON when connected properly?

The UPES processor card may not be making full contact. Ensure that the processor card and all the channel cards are pushed in making contact with the UPES. The processor card and channel cards can be accessed from the back of the UPES.

How can the UPES channels be programmed?

The UPES controller can be programmed with software via RS485 or manually by accessing the buttons behind the front control door.

The operating manual has a detailed description of how to access each channel's settings manually to adjust or to change parameters for each channel.

Can Oxygen gas detectors be connected to the UPES Controller?

Yes, the UPES controller's individual channel can be programmed to set the increasing and decreasing alarm threshold relays using oxygen gas detectors without affecting the other channels.

Can Flame detectors be connected to the UPES controller?

Yes, ESP Safety flame detectors can be connected to the UPES Controller. The UPES will only declare an alarm when the fire detector declares an alarm; otherwise, the channel with the connected flame detector will be in normal conditions.

What outputs are available from the UPES to PLCs or other Controllers?

The UPES has RS485 and analog 4-20mA signal outputs, which can be used to communicate with PLCs or other controllers that may activate secondary responses from other mechanical systems or emergency shutdown systems.

Is there an enclosure available for the UPES?

The UPES controller can be placed inside an enclosure for indoor applications.

Are the individual channel cards replaceable?

If an UPES channel card is damaged, the channel card can be replaced.

If all channel cards are not being used, can a non-used channel card be used to replace a damaged channel card that is currently in use?

Yes, the unused channel cards can be used as spare channel cards to replace any damaged channel cards if not all of the channel cards are being used in the system.

What are the default factory channels programmed if there are unused channels in the controller?

All the channels are programmed for gas detectors. They can be changed manually or with the UPES controller software.

